

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An apparatus for processing a stream that contains encrypted packets of information representing a signal for at least ~~quasi-quasi-~~continuous rendering, the apparatus comprising:
- 5 —\_\_\_\_\_a decryption unit ~~arranged for~~ applying selectable ones of a plurality of different decryption algorithms to packets representing the signal; and
- \_\_\_\_\_an algorithm selection unit ~~arranged to read~~for reading algorithm selection information from the stream and ~~to control~~for
- 10 controlling dynamically which of the plurality of decryption algorithms the decryption unit applies to respective ones of the packets from the stream, dependent on the algorithm selection information.
2. (Currently Amended) ~~An~~The apparatus ~~according to~~as claimed in Claim 1, wherein at least a first and second one of the algorithms differ in robustness against unauthorized decryption.
3. (Currently Amended) ~~An~~The apparatus ~~according to~~as claimed in Claim 2, wherein the first and second one of the algorithms differ in the size of keys used in the respective algorithms.

4. (Currently Amended) ~~An~~The apparatus according to ~~as claimed~~  
in Claim 1, wherein the algorithm selection information selects the  
algorithm for respective ones of the packets individually, the  
algorithm selection unit controlling the decryption unit on a  
5 packet by packet basis.

5. (Currently Amended) ~~An~~The apparatus according to ~~as claimed~~  
in to Claim 4, wherein algorithm selection unit reads the algorithm  
selection information for each particular packet from that packet.

6. (Currently Amended) ~~An~~The apparatus according to ~~as claimed~~  
in Claim 1, wherein at least a first one of the decryption  
algorithms requires a selectable key, the apparatus comprising a  
key extraction unit for extracting key values for that key from the  
5 stream and for supplying the extracted key values to the decryption  
unit for use as the selectable key when the first one of the  
decryption algorithms is used.

7. (Currently Amended) ~~An~~The apparatus according to ~~as claimed~~  
in Claim 6, wherein the stream comprises a decryption control code,  
different values of the control code selecting using a first  
available key values with the first one of the decryption  
5 algorithms, using a second available key values with the first one

of the decryption algorithms and using a second one of the decryption algorithms respectively, the algorithm selection unit being arranged to decode the algorithm extraction information from the decryption control code.

8. (Currently Amended) ~~An~~ The apparatus according to as claimed in Claim 6, wherein the apparatus is arranged to obtain a key for use in the second decryption algorithm from outside the stream.

9. (Currently Amended) ~~An~~ The apparatus according to as claimed in Claim 1, wherein the decryption circuit comprises a pipe-line of a decryption units, for decrypting applying different ones of the decryption algorithms respectively, a front one of the decryption  
5 units in the pipe-line being arranged to pass packets undecrypted to a succeeding one of the decryption units, when the algorithm selection information indicates that the decryption algorithm applied by the front one of the decryption units need not be applied.

10. (Currently Amended) ~~An~~ The apparatus according to as claimed in Claim 1, switchable between a first and second mode of operation, the apparatus decrypting all packets of the signal in the first mode, the apparatus decrypting only packets that are

5 decryptable with a first one of the decryption algorithms in the second mode.

11. (Currently Amended) A method of processing a stream that contains encrypted packets of information representing a signal for use in at least quasi continuous rendering, the method comprising the steps of:

5 —\_\_\_\_\_reading packets that represent the signal from the stream;  
—\_\_\_\_\_reading algorithm selection information from the stream;  
and  
—\_\_\_\_\_applying a selected one of a plurality of decryption algorithms to packets representing the signal, the decryption  
10 algorithm being selected for respective ones of the packets dynamically on the basis of the algorithm selection information.

12-18. (Cancelled).

19. (Currently Amended) An apparatus for outputting a stream ~~that contains~~containing encrypted packets of information representing a signal for at least ~~quasi~~quasi-continuous rendering, the apparatus comprising:

5 —\_\_\_\_\_an algorithm selection unit, for selecting at least one of a plurality of decryption algorithms by which respective ones of the packets should be decryptable, so that the required one of the

decryption algorithms changes dynamically in the course of the stream;

- 10 —\_\_\_\_\_an encryption unit for encrypting the packets, the encryption unit being arranged to use a plurality of different forms of encryption for the packets that represent the signal, each form requiring a respective one of the decryption algorithms, the algorithm selection unit controlling which of the forms are used by  
15 the encryption unit for generating the respective ones of the packets in the stream; and  
—\_\_\_\_\_an algorithm selection information encoding unit for dynamically encoding selection information in the stream to indicate which of the decryption algorithms should be used for the  
20 packets that represent the signal.

20-21. (Cancelled).

22. (Currently Amended) ~~An~~ The apparatus according to as claimed  
in Claim 19, the signal being a video signal comprising independently decodable video frames and dependently decodable video frames that are decodable as updates to other video frames,  
5 wherein the algorithm selection unit is arranged to select a first one of the decryption algorithms for packets that contain no information from the independently decodable frames and a second

one of the decryption algorithms for packets that contain information about the independently decodable frames.

23. (Currently Amended) ~~An~~ The apparatus according to as claimed  
in Claim 19, the algorithm selecting unit selecting first keys  
required for the first one of the decryption algorithms, the first  
keys varying during progress of the stream while a second key for  
5 the second one of the decryption algorithms, if any, remains the  
same, or changes less frequently than the first keys, the second  
one of the algorithms being an algorithm that is more robust  
against unauthorized hacking than the first one of the algorithms.

24. (Currently Amended) ~~An~~ The apparatus according to as claimed  
in Claim 19, wherein the algorithm selection unit is arranged to  
select the decryption algorithm on a packet by packet basis, the  
algorithm selection information encoding unit encoding the  
5 algorithm selection information for respective ones of the packets  
individually in the stream.

25. (Currently Amended) ~~An~~ The apparatus according to as claimed  
in Claim 24, wherein the algorithm selection information encoding  
unit is arranged to encode the algorithm selection information for  
each particular packet in that particular packet.

26. (Currently Amended) ~~An~~The apparatus ~~according to~~as claimed  
in Claim 19, wherein the encryption unit encrypts the packets for  
decryption with the first decryption algorithm so that successively  
different decryption keys are required for decryption, the packets  
5 for decryption with the second decryption requiring a non-changing  
key, if any, or a key that changes less frequently than the  
successively different decryption keys of the first decryption  
algorithm.

27. (Currently Amended) ~~An~~The apparatus ~~according to~~as claimed  
in Claim 26, wherein the second decryption algorithm is an  
algorithm that is more robust against unauthorized hacking than the  
first decryption algorithm.

28. (Currently Amended) ~~An~~The apparatus ~~according to~~as claimed  
in Claim 26, the algorithm selection information encoding unit  
including the algorithm encoding information and key selection  
information for selecting from available ones of the successively  
5 different decryption keys encoded together in a code, so that  
different values of the code select the first decryption algorithm  
with different available ones of the successively different  
decryption keys and the second decryption algorithm respectively.

29. (Currently Amended) A method of outputting a stream ~~that contains~~containing encrypted packets of information representing a signal for use in at least quasi continuous rendering, the apparatus comprising the steps of:

- 5 — selecting a plurality of different decryption algorithms by which respective ones of the packets should be decodable, so that the required one of the decryption algorithms changes dynamically in the course of the stream;
- encrypting the packets in the stream so that the selected
- 10 ones of the decryption algorithms are needed for decrypting the packets; and
- dynamically encoding selection information in the stream to indicate which of the decryption algorithms should be used for the packets that represent the signal.

30-38. (Cancelled).

39. (Currently Amended) A transcrypting apparatus for transcrypting a stream that contains encrypted packets of information representing a signal for at least ~~quasi-quasi-~~ continuous rendering, said transcrypting apparatus comprising:

- 5 — a stream input and a stream output, for inputting and outputting the stream, respectively;



—\_\_\_\_\_a selection unit for selecting a subset of packets from a set of packets that represent the signal;

—\_\_\_\_\_a decryption unit for decrypting the packets of the subset  
10 with a first decryption algorithm;

—\_\_\_\_\_an encryption unit for encrypting the packets of the subset with a form of encryption that requires at least a second decryption algorithm different from the first decryption algorithm;

—\_\_\_\_\_an algorithm selection information encoding unit for  
15 dynamically encoding selection information that indicates which of the first algorithm and at least the second decryption algorithms should be used for which of the packets that represent the signal;  
and

—\_\_\_\_\_an output unit for outputting encrypted packets from the  
20 stream input that are not contained in the first subset in combination with the packets from the subset that have been encrypted with said form of encryption.

40. (Cancelled).

41. (Currently Amended)     A—The transcrypting apparatus ~~according to~~  
~~as claimed in~~ Claim 39, wherein the output unit is arranged to  
output packets that are not contained in the first subset as  
encrypted at the stream input, the output unit outputting the  
5 packets from the subset that have been encrypted with said form of

encryption interspersed with the output packets that are not contained in the first subset.

42. (Currently Amended) ~~A~~The transcrypting apparatus ~~according~~  
~~to~~as claimed in Claim 39, the signal being a video signal  
comprising independently decodable video frames and dependently  
decodable video frames that are decodable as updates to other video  
5 frames, wherein the subset comprises all packets that contain  
information about the independently decodable video frames.

43. (Currently Amended) ~~A~~The transcrypting apparatus ~~according~~  
~~to~~as claimed in Claim 39, wherein the algorithm selection  
information encoding unit is arranged to encode the selection for  
respective ones of the packets individually.

44. (Cancelled).

45. (Currently Amended) A method of transcrypting a stream ~~that~~  
~~contains~~containing encrypted packets of information representing a  
signal for at least quasi continuous rendering, the method  
comprising the steps of:  
5 —       receiving the stream;  
—       selecting a subset of packets from a set of packets that  
represent the signal;

—\_\_\_\_\_decrypting the packets of the subset with a first decryption algorithm;

10 —\_\_\_\_\_reencrypting the packets of the subset with a form of encryption that requires at least a second decryption algorithm different from the first decryption algorithm;

—\_\_\_\_\_encoding selection information that indicates dynamically which of the first algorithm and at least the second decryption

15 algorithms should be used for which of the packets that represent the signal-; and

—\_\_\_\_\_replacing the packets of the subset in the stream by the reencrypted packets.

46. (Cancelled).

47. (Currently Amended)     ~~A-The method according to~~ as claimed in Claim 45, the signal being a video signal comprising independently decodable video frames and dependently decodable video frames that are decodable as updates to other video frames, wherein the subset

5 comprises all packets that contain information about the independently decodable video frames.

48. (Currently Amended)     ~~A-The method according to~~ as claimed in Claim 45, wherein the algorithm selection information encoding unit

is arranged to encode the selection for respective ones of the packets individually.

49. (Cancelled).

50. (Currently Amended) An apparatus for processing a stream containing encrypted packets of video information from a program, the apparatus comprising:

—\_\_\_\_\_a supply circuit for supplying first and second control words for decrypting first and second packets of video information from the program, the supply circuit periodically replacing the first control word using information from the stream while keeping the second control word unchanged during successive changes of the first control word, the supply circuit obtaining control word selection code to select which of the first and second control word will be supplied for respective ones of the packets; and  
—\_\_\_\_\_a decryption circuit arranged to decrypt packets of video information from the program with the keywords supplied by the supply circuit.—

51. (Currently Amended) ~~An~~ The apparatus according to as claimed in Claim 50, wherein the decryption circuit is arranged to apply a first and second, mutually different decryption algorithm for decryption of the packets decrypted with the first and second

5 control word respectively, the second decryption algorithm being more robust against unauthorized hacking than the first decryption algorithm.

52. (Currently Amended) ~~An~~ The apparatus according to ~~as claimed~~  
in Claim 50, wherein said apparatus is switchable between a first  
mode and a second mode, so that in the first mode, both first and  
second packets of the program are decrypted, and in the second  
5 mode, only second packets of the program are decrypted.

53. (Currently Amended) ~~An~~ The apparatus according to ~~as claimed~~  
in Claim 52, wherein the apparatus ~~has~~ further comprises a decoding  
unit arranged to produce a trick play video signal of the program  
from the decrypted second packets in the second mode and a normal  
5 play video signal of the program from the decrypted first and  
second packets in the first mode.

54. (Currently Amended) ~~An~~ The apparatus according to ~~as claimed~~  
in Claim 50, wherein the decryption circuit is arranged to  
distinguish between the first and second packets on the basis of  
information included in the packets.

55. (Currently Amended) An apparatus for transcribing an input stream of encrypted packets of video information from a program, the apparatus comprising:

—\_\_\_\_\_a decryption unit coupled to a stream input for receiving  
5 packets of video information from the program, the decryption unit being arranged to decrypt the packets using regularly updated first control words;

—\_\_\_\_\_an encryption unit coupled to the decryption unit for receiving decrypted packets and re-encrypting the packets using a  
10 second control word that does not change or changes less frequently than the first control words;

—\_\_\_\_\_a packet selection unit, coupled to the stream input for detecting selected packets; and

—\_\_\_\_\_a stream forming unit coupled to the stream input, to an  
15 output of the encryption unit and the packet selection unit for forming an output stream from the input stream, wherein the selected packets are replaced by the re-encrypted packets.

56. (Currently Amended) ~~An~~ The apparatus ~~according to as claimed~~  
in Claim 55, wherein the encryption unit is arranged to re-encrypt the packets of video information from the program with an encryption process that is more robust against unauthorized hacking  
5 than the first decryption algorithm.

57. (Currently Amended) ~~An~~ The apparatus according to ~~as claimed~~  
in Claim 56, wherein the packet selection unit is arranged to  
select the selected packets according to whether the selected  
packets contain information of video frames that are decodable  
5 independently, without reference to other video frames.

58. (Currently Amended) ~~An~~ The apparatus according to ~~as claimed~~  
in Claim 56, wherein the encryption unit is arranged to include in  
the output stream selection information to indicate for each packet  
individually whether a first or second decryption process should be  
5 used.

59. (Currently Amended) A stream of data that contains  
encrypted packets of information representing a signal for at least  
~~quasi-quasi-~~continuous rendering, the stream of data comprising:  
— algorithm selection information indicating for  
5 interspersed packets of the signal which of a plurality of  
different decryption algorithms should be used for decrypting  
respective ones of the packets of the signal; and  
— packets of the signal encrypted so that different  
decryption algorithms have to be used for decrypting different ones  
10 of the packets.

60-62. (Cancelled).

63. (Currently Amended) A system for processing a stream that contains encrypted packets of information representing a signal for at least quasi continuous rendering, the system comprising:

—\_\_\_\_\_an algorithm selection unit, for selecting at least one of  
5 a plurality of decryption algorithms by which respective ones of the packets should be decodable, so that the required one of the decryption algorithms changes dynamically in the course of the stream;

—\_\_\_\_\_an encryption unit for encrypting the packets, the  
10 encryption unit being arranged to use a plurality of different forms of encryption for the packets that represent the signal, each form requiring respective ones of the decryption algorithms, the algorithm selection unit controlling which of the forms are used for the respective ones of the packets by the encryption unit;

15 —\_\_\_\_\_an algorithm selection information encoding unit for dynamically encoding selection information in the stream to indicate which of the decryption algorithms should be used for the packets that represent the signal.

—\_\_\_\_\_a decryption unit arranged for applying selectable ones of  
20 a plurality of different decryption algorithm to packets representing the signal; and

—\_\_\_\_\_an algorithm selection unit arranged to read the algorithm selection information from the stream and to control dynamically



which of the plurality of decryption algorithms the decryption unit  
25 applies to respective ones of the packets from the stream,  
dependent on the algorithm selection information.